INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/004471

A. CLASSIFICATION OF SUBJECT MATTER Int. Cl^7 G09F9/00, G09F9/33, H05B33/26, G02F1/1343

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G09F9/00-9/46, H05B33/12-33/28, G02F1/1343-1/1368

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2005

Kokai Jitsuyo Shinan Koho 1971-2005 Toroku Jitsuyo Shinan Koho

1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 10-339880 A (Hitachi, Ltd.),	1-7,10,12,16
Y	22 December, 1998 (22.12.98),	8,9,11,
	Full text; all drawings	13-15,17
A	(Family: none)	18
Y	JP 2001-118847 A (Sharp Corp.), 27 April, 2001 (27.04.01), Abstract; Par. Nos. [0095] to [0112];	8,9,11,15
	Figs. 1, 2 & US 6683669 B1	
Y	JP 2-67522 A (Jieko Kabushiki Kaisha), 07 March, 1990 (07.03.90), Page 3, lower left column, line 8 to page 4, upper right column, line 13; Fig. 1 (Family: none)	11,15

×	Further documents are listed in the continuation of Box C.		See patent family annex.	
*	Special categories of cited documents:	- T	later document published after the international filing date or priority	
"A"	document defining the general state of the art which is not considered to be of particular relevance		date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive	
"L"	document which may throw doubts on priority claim(s) or which is	s	step when the document is taken alone	
	cited to establish the publication date of another citation or other special reason (as specified)		document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is	
"O"	document referring to an oral disclosure, use, exhibition or other means		considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
	document published prior to the international filing date but later than the priority date claimed			
		"&"	document member of the same patent family	

Telephone No.

Date of the actual completion of the international search
08 April, 2005 (08.04.05)

Date of mailing of the international search report
26 April, 2005 (26.04.05)

Name and mailing address of the ISA/

Japanese Patent Office

Authorized officer

Facsimile No.
Form PCT/ISA/210 (second sheet) (January 2004)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/004471

. (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 9-102395 A (Sony Corp.), 15 April, 1997 (15.04.97), Par. Nos. [0024] to [0028]; Figs. 1 to 3, (Family: none)	13,14
Y	JP 2003-295782 A (Rohm Co., Ltd.), 15 October, 2003 (15.10.03), / Par. Nos. [0020] to [0035]; Figs. 1 to 3 & US 2003/197475 A1 / & JP 2003-332043 A & JP 2003-332044 A	13,14
A	JP 8-160444 A (Kabushiki Kaisha Nihon Jidosha Buhin Sogo Kenshusho), 21 June, 1999 (21.06.99), Abstract (Family: none)	12
А	JP 2-281237 A (Fujitsu Ltd.), 16 November, 1990 (16.11.90), Claims; Figs. 1, 2 (Family: none)	12
А	JP 2003-222899 A (Casio Computer Co., Ltd.), 08 August, 2003 (08.08.03), / Abstract (Family: none)	1-18
A	JP 4-184318 A (Matsushita Electric Industrial Co., Ltd.), / 01 July, 1992 (01.07.92), Fig. 1 (Family: none)	1-18
A	JP 2003-77685 A (LG Electronics Inc.), 14 March, 2003 (14.03.03), Abstract; Par. Nos. [0004] to [0006]; Fig. 1 & US 2003/038591 A1 & KR 2003017696 A & EP 1286397 A2	1-18
A	JP 7-152043 A (Fujitsu Ltd.), / 16 June., 1995 (16.06.95), Abstract (Family: none)	1-18

INTERNATIONAL SEARCH REPORT	PCT/JP2005/004471	
The inventions of claims 15-18 are not supported by the description and drawings of the international application whose priority is claimed.		
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